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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,537	05/16/2005	Je-Kwon Goo	B-5537PCT 622217-1	7803
36716	7590	04/29/2009		
LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679			EXAMINER NGUYEN, THUY-AI N	
			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			04/20/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/509,537

**Applicant(s)**

GOO ET AL.

**Examiner**

THUY-AI N. NGUYEN

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's request for continued examination filed on March 04, 2009 has been considered. Claims 10- 12 are amended. Claims 1- 12 are pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10- 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "NaCl" and "SCHS" are put in parenthesis. It is unclear whether they are part of the limitation of the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10- 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gu Seiken et al. (JP. 2000-169879) and as evidenced by "Unabridged Chemical Dictionary".

Considering Claim 10: Gu Seiken teaches a method for preparing soap containing salt which comprises:

- neutralizing a saturated or unsaturated fatty acid, obtained from palm oil, with caustic soda (sodium hydroxide) (§0023, 31, 33), wherein the alkyl of the fatty acid has 7 to 21 carbon atoms and has the formula  $\text{RCOO}$  (§0019).

- reacting the fatty acid salt with 3-chloro-2-hydroxypropanesulfonic acid (§0020) having the same formula as claimed by the applicant (§0037), wherein the process of preparing comprises the solvent including water (§0039).

Because Gu Seiken et al. teach the process having the same steps with the same compounds, it would be obvious to one of ordinary skill in the art to know that Gu Seiken et al. also have the same salt with the same amount as said by the applicant because Gu Seiken et al. teach the ratio of fatty acid salt and chlorosulfonic acid within the range as said by the applicant (see the rejection of claim 12 below).

With regard to the claimed lauric and myristic acid content, Gu Seiken teaches that the fatty acid is obtained from palm oil (§0023). Palm oil, as shown by the "Unabridged Chemical Dictionary", comprises 44-52 percent lauric acid and 13-19 percent myristic acid (p323). Therefore, palm oil would comprise from 57 to 71 percent lauric and myristic acid, which overlaps the claimed range of over 60 wt%.

Considering Claim 11: Gu Seiken teaches the alkyl group of the fatty acid obtained independent or mixed fatty acid (§0019). Therefore, the fatty acid can be used alone or in combination.

Considering Claim 12: Gu Seiken teaches the method for preparing soap, wherein the fatty acid salt (beef tallow sodium) is about 76.65 percent (example 1), and chlorosulfonic acid is in an amount from 30 to 45 percent by weight (§0039). Therefore, the ratio of fatty acid salt to chlorosulfonic acid (Chemical formula 2 as in the claim) is about 2:1 or 1:0.5 within the range as claimed by the applicant.

### ***Response to Arguments***

Applicant's arguments filed on March 4, 2009 have been fully considered but they are not persuasive. Gu Seiken et al. disclose the same method of making soap with the same steps and compounds; therefore, Gu Seiken et al. would have the same product comprising the same salt with the same amount as claimed (see the rejection above).

Applicant argues that the amount of 2 to 15 percent of salts refer to sodium chloride. However, according to the paragraph [0055], the final product obtained from the reaction of fatty acid salt and 3-chloro-2- hydroxypropanesulfonic acid sodium salt comprises salts including monoglyceride sulfonate, fatty acid alkali metal salt, sodium chlorohydroxy sulfonate, sodium dihydroxy sulfonate and salt (F) which can be sodium chloride. According to paragraph [0080], the amount of 2 to 15 percent just generally refers to salt. There is no where in the specification mentioned about sodium chloride. Therefore, the amount of from 2 to 15 percent of sodium chloride salt is not supported in the specification.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THA

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796